SYSTEM AND METHOD FOR REMOTELY MONITORING AT LEAST ONE PHYSIOLOGICAL CHARACTERISTIC OF A CHILD

ABSTRACT OF THE DISCLOSURE

There is disclosed a system and method for remotely monitoring at least one physiological condition of a child by detecting very low frequency acoustic signals. The apparatus comprises a sensor that is capable of detecting low frequency acoustic signals in the frequency range of one tenth Hertz to thirty Hertz. The sensor comprises a chamber having portions that form a cavity and a low frequency microphone placed within the cavity. An alternate embodiment of the invention comprises a chamber having portions that form a resonant cavity, a microphone mounted in the resonant cavity, and a membrane that covers the resonant cavity. Low frequency acoustic signals that are incident on the membrane cause the membrane to move and amplify the acoustic signals within the resonant cavity. The sensor provides information concerning physiological conditions of the child, such as respiration and cardiac activity. The sensor in a physiological condition monitor does not need to be directly coupled to the skin of the child being monitored.